

IN THE CLAIMS

Please substitute the following listing of claims for the previous listing of claims.

1. (Currently amended) A substrate processing chamber component comprising:

(a) a structure composed of aluminum oxide and having a roughened surface with a roughness average of from about 150 to about 450 microinches; and

(b) a plasma sprayed ceramic coating deposited on the roughened surface of the structure, the plasma sprayed ceramic coating composed of aluminum oxide, wherein the plasma sprayed ceramic coating comprises a textured exposed surface having a roughness with an average skewness across the textured exposed surface that is a negative value and less than about -0.1.

2. (Original) A component according to claim 1 wherein the plasma sprayed ceramic coating comprises a textured exposed surface having a roughness average of from about 150 to about 450 microinches.

3. (Original) A component according to claim 1 wherein the plasma sprayed ceramic coating comprises a porosity of from about 5% to about 10%.

4. (Original) A component according to claim 1 wherein the plasma sprayed ceramic coating comprises a thickness of from about 1 mil to about 8 mils.

5. (Original) A component according to claim 1 wherein the component comprises a domed enclosure wall.

6. (Original) A component according to claim 5 wherein the domed enclosure wall comprises at least a portion of a ceiling.

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7. (Original) A component according to claim 1 wherein the plasma sprayed ceramic coating is adapted to be exposed to an energized gas in an etching chamber or a chemical vapor deposition chamber.

8. (Original) A substrate processing chamber comprising the component of claim 1, the substrate processing chamber comprising a substrate support, a process gas supply, a plasma generator to energize the process gas, and a gas exhaust.

9. (Currently amended) A domed enclosure wall for a substrate processing chamber, the domed enclosure wall comprising:

(a) a structure composed of aluminum oxide, the structure having a roughened surface with a roughness average of from about 150 to about 450 microinches; and

(b) a plasma sprayed ceramic coating deposited on the surface of the structure, the plasma sprayed ceramic coating being composed of aluminum oxide and having a porosity of from about 5% to about 10%, wherein the plasma sprayed ceramic coating comprises a textured exposed surface having a roughness with an average skewness across the textured exposed surface that is a negative value and less than about -0.1.

10. (Canceled)

11. (Original) A wall according to claim 9 wherein the structure comprises at least a portion of a chamber ceiling.

12. (Withdrawn) A method of fabricating a component of a plasma processing chamber, the method comprising:

- (a) providing a perform composed of aluminum oxide;
- (b) roughening a surface of the preform to form a roughened surface having a roughness average of from about 150 to about 450 microinches; and
- (c) depositing a plasma sprayed ceramic coating on the roughened surface of the perform, the plasma sprayed ceramic coating composed of aluminum oxide.

13. (Withdrawn) A method according to claim 12 wherein (a) comprises forming a dome shaped structure.

14. (Withdrawn) A method according to claim 12 wherein (b) comprises grit blasting the surface of the structure to form the roughened surface.

15. (Withdrawn) A method according to claim 12 wherein (c) comprises injecting an aluminum oxide powder through a plasma arc maintained at a temperature that is sufficiently high to maintain the aluminum oxide material in a molten state until it impacts the perform.

16. (Withdrawn) A method of fabricating a component of a substrate processing chamber, the method comprising:

- (a) providing a perform composed of aluminum oxide;
- (b) roughening a surface of the preform to form a roughened surface having a roughness average of from about 150 to about 450 microinches;
- (c) depositing a first plasma sprayed ceramic coating over at least a portion of the roughened surface, the first plasma sprayed ceramic coating composed of aluminum oxide; and
- (d) depositing a second plasma sprayed ceramic coating over at least a portion of the roughened surface, the second plasma sprayed ceramic coating composed of aluminum oxide.

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17. (Withdrawn) A method according to claim 16 wherein (a) comprises forming a dome shaped structure.

18-19. (Canceled)

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